

WHAT IS CLAIMED:

1. A method of programming an electronic device comprising:
transferring program data from outside the electronic device to a programmable
5 memory in the electronic device via a controller circuit that controls programming of the
programmable memory in the electronic device that is separate from a general operation
processor circuit used to provide general operations of the electronic device subsequent to
transferring the program data into the programmable memory.
- 10 2. A method according to Claim 1 wherein the step of transferring further
comprises:
transferring the program data without using Random Access Memory (RAM) and
Read Only Memory (ROM) devices, that are separate from the controller circuit.
- 15 3. A method according to Claim 2 wherein the RAM and ROM operate under
control of the general operation processor circuit and not under the control of the
controller circuit.
- 20 4. A method according to Claim 1 wherein the step of transferring the
program data further comprises transferring the program data via a Video Graphics
Adapter (VGA) interface to the electronic device.
- 25 5. A method according to Claim 1 wherein the step of transferring the
program data further comprises transferring the program data via an Inter-Integrated
Circuit interface to the electronic device.
- 30 6. A method according to Claim 1 wherein the general operation processor
circuit accesses the program data in the programmable memory to provide the general
operations of the electronic device subsequent to transferring the program data into the
programmable memory.
7. A method according to Claim 6 wherein the general operation processor
circuit accesses separate RAM and ROM to provide general operations of the electronic
device.

8. A method according to Claim 1 further comprising:
preventing the general operation processor circuit from accessing the
programmable memory during the transfer of program data into the programmable
memory.

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9. A method according to Claim 1 further comprising:
transmitting an indication to outside the electronic device that the transfer of
program data to the programmable memory is complete.

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10. A method according to Claim 9 further comprising:
transmitting a reset to the controller circuit to enable the general operation
processor circuit to access the program data transferred into the programmable memory.

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11. A method of programming an electronic device comprising:
preventing access of a general operation processor circuit in the electronic device
to a programmable memory in the electronic device during a transfer of program data
from outside the electronic device to the programmable memory to program the
programmable memory.

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12. A method according to Claim 11 wherein the general operation processor
circuit provides operations of the electronic device subsequent to transferring the program
data to the programmable memory.

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13. A method according to Claim 12 wherein the general operation processor
circuit accesses the program data in the programmable memory to provide the general
operations of the electronic device subsequent to transferring the program data into the
programmable memory.

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14. A method according to Claim 11 further comprising:
transferring data from outside the electronic device to a controller circuit inside
the electronic device that is separate from the general operation processor circuit; and
programming the program data into the programmable memory.

15. A method of programming an electronic device comprising:
preventing a general operation processor circuit in the electronic device used to
5 control general operations of the electronic device from accessing a programmable
memory in the electronic device;

transferring data from outside the electronic device to a controller circuit inside
the electronic device that is separate from the general operation processor circuit; and
programming the program data from the controller circuit into the programmable
10 memory.

16. A method according to Claim 15 further comprising:
transmitting an indication to outside the electronic device that the programming of
the program data is complete.

15 17. A method according to Claim 16 further comprising:
transmitting a reset to the controller circuit to enable the general operation
processor circuit to access the program data programmed into the programmable memory
to provide general operations of the electronic device.

20 18. A method of programming data into a programmable memory in an
electronic device comprising:
avoiding providing address information that is configured to identify an address in
the programmable memory during programming the programmable memory.

25 19. A method of programming data into a programmable memory in an
electronic device comprising:
providing head data to the electronic device configured to include information to
identify data included in other fields associated with the head data as data for
30 programming into a programmable memory;
providing command data associated with the head data configured to include a
programming operation to be carried out in the programmable memory using associated
data; and

providing data associated with the command head data that is configured to include data to be programmed into the programmable memory according to the command, wherein address information used to program the programmable memory is absent from the data.

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20. A circuit for programming a monitor comprising:

a controller circuit configured to transfer program data from outside the monitor to a programmable memory in the monitor, the controller circuit being separate from a general operation processor circuit used to provide general operations of the monitor subsequent to transferring the program data into the programmable memory.

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21. A circuit according to Claim 20 wherein the controller circuit comprises:

a decoder circuit coupled to an interface via which the program data is transferred to the monitor, the decoder circuit configured to provide a first signal responsive to determining that data received via the interface includes an address within a controller circuit address range; and

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a programmable memory controller coupled to the decoder circuit configured to provide at least one control signal to the programmable memory responsive to the first signal.

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22. A circuit according to Claim 21 further comprising:

a buffer circuit coupled to the decoder circuit and the programmable memory and configured to provide data to/from the programmable memory.

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23. A data structure used for programming data into a programmable memory in an electronic device, the data structure being embodied in a computer readable medium, the data structure comprising:

a head field configured to include information to identify data included in other fields associated with the head field as data for programming into a programmable memory;

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a command field associated with the head field configured to include a programming operation to be carried out in the programmable memory using associated data; and

a data field associated with the command field and the head field that is configured to include data to be programmed into the programmable memory according to the command, wherein address information used to address the programmable memory is absent from the data field.

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